BELL ATLANTIC – NEW YORK

PLANS OF BELL ATLANTIC - NEW YORK FOR THE COOPERATIVE IMPROVEMENT OF THE DSL UNE LOOP PROVISIONING PROCESS

Dated: New York, New York March 31, 2000

Plans Of Bell Atlantic - New York For The Cooperative Improvement Of The DSL UNE Loop Provisioning Process

I.	INTRODUCTION	1
II.	DSL UNE LOOP PROVISIONING PROCESS	2
	A. DSL UNE Loops	2
	B. Overview of the DSL UNE Loop Provisioning Process	4
	1. Preparation And Submission Of A Valid DSL Local Service Request	5
	2. Facility Qualification And Loop Assignment	5
	3. CO Wiring	6
	4. Field Installation.	6
	C. DSL UNE Loop Performance Standards	7
	1. Ordering: P0-8 – Manual Loop Qualifications	7
	2. Provisioning And Installation: PR-4 – Missed Appointments	8
	3. Installation Quality: PR-6 – Installation Troubles	8
III.	DSL UNE LOOP PERFORMANCE IMPROVEMENTS – JULY 1999 - DECEMBER 1999	98
	A. Improvements In DSL Loop Qualification And Engineering Request Performance	9
	1. Implementation Of Dedicated Manual Loop Qualification Work Force	.10
	2. Deployment Of Mechanized Loop Qualification Database	.11
	a. Conversion Of Wire Center Data	11
	b. Consolidation Of Address Databases	11
	B. Improvements In On-Time Completion Performance	.12
	1. CLEC DSL Training	.12
	2. Coordination Of DSL Order Pre-Provisioning	.13
	3. Implementation Of Pair Swapping	.13
	4. Implementation Of No Access Management And Coordination Process	.14

	5. Implementation Of A Cooperative Testing Process	14
	6. Redesign Of The Central Office Wiring Process	15
	7. DSL Field Installation Work Force To Work Load Management	16
	8. Specialized Training Of Field Installation Forces	17
	C. Improvement in Installation Related Trouble Report Performance	17
IV.	PLANNED DSL PERFORMANCE IMPROVEMENTS – JANUARY - MARCH 20	0018
	A. Loop Qualification Process Enhancements	18
	B. Enhancements To The On Time Order Completion Process	19
	1. Cooperative Testing – Stage 2	20
	a. Deployment Of Intelligent Demarcation Technology	20
	b. Use Of CLEC Tone-Generating Equipment	21
	2. CLEC Access To OQS Summary Report Tool	21
	3. Supervision Of CO And Field Installation Work	21
	4. CLEC Education	22
	5. Force To Work Load Management	22
	6. CLEC Forecasting	22
	7. Load Grooming	22
v.	FUTURE DSL PERFORMANCE IMPROVEMENT CONSIDERATIONS	23
	A. Implementation Of Line Sharing	23
VI	CONCLUSIONS	24

I. INTRODUCTION

This document sets forth the Plans and Programs that Bell Atlantic-New York ("BA-NY") has developed to improve the provisioning of unbundled loops for Competitive Local Exchange Carriers ("CLECs") that want to provide Digital Subscriber Loop ("DSL") services to their customers. These Plans and Programs are derived from the Plans and Programs recently developed in the collaborative process that BA-NY entered into with the CLECs and the staff of the New York State Public Service Commission (the "Commission Staff") in August, 1999. ¹ The main objective of the collaborative is to provide a forum where BA-NY, the CLECs and the Commission Staff could reach agreement on joint issues related to the provisioning of DSL services by CLECs over BA-NY's unbundled loops ("DSL UNE Loops"). ²

The collaborative has focused its work on the opportunities for cooperative improvement in loop qualification, provisioning, field installation, Central Office ("CO") wiring and repair. Through the collaborative, BA-NY, the Commission Staff, and the CLECs have mutually agreed on specific voluntary process improvements to deliver quality DSL UNE Loops and minimize missed delivery commitments.

¹

¹ In a letter from BA-NY to the Commission, BA-NY stated "[i]n January 2000, BA-NY will share with the collaborative additional plans and timelines for cooperative improvement in [DSL] provisioning performance. These plans and timelines will include continued CLEC education, CLEC forecasting, and BA-NY training and manpower additions." (*See* Letter from Randal S. Milch, Esq. to Lawrence G. Malone, Esq., dated December 10, 1999) (the "December 10 Letter").)

² The collaborative started prior to the issuance by the Federal Communications Commission (the "FCC") of the order requiring that incumbent local exchange carriers, like BA-NY, provide "line sharing" over their POTs voice lines. *See* CC Dockets No. 98-147 and 96-98 *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996* "Third Report and Order in CC Docket No. 98-147 Fourth Report and Order in CC Docket No. 96-98" (*released* December 9, 1999). In that Order, the FCC stated: "We require incumbent LECs to provide unbundled access to the high frequency portion of the loop to any carrier that seeks to deploy any version of xDSL that is presumed to be acceptable for shared-line deployment in accordance with our rules." *Id.* at 35 footnote omitted.

Section II of this document provides a brief overview of the DSL UNE Loop provisioning process. Section III highlights the Plans and Programs BA-NY and the CLECs have initiated in the last five months as part of the collaborative to improve the provisioning process. Section IV describes BA-NY's Plans and Programs for the first quarter of 2000. Finally, Section V discusses briefly the impact Line Sharing could have on any potential process improvements for the provisioning of DSL UNE Loops.

II. DSL UNE LOOP PROVISIONING PROCESS

A. DSL UNE Loops

DSL UNE Loops provide high-speed data services to customers over traditional copper telephone lines. A number of important technical differences between DSL UNE Loops and traditional telephone service characteristics require heightened cooperative efforts to ensure enduser satisfaction. These differences include:

Absence of Dial Tone

DSL UNE Loops do not have dial tone, hindering line identification or automatic number identification ("ANI") and simple continuity testing during circuit installation and maintenance testing.

Absence of CO Battery

Traditional telephone services are powered by a battery power source at the CO. This power source is not used in a DSL UNE Loop. Absence of battery power complicates identification of circuits during circuit installation and maintenance testing.

Use of Digital Transmission Loop Electronics

DSL UNE Loops require additional electronic components in the circuit. This complicates installation and often requires removal of equipment at the end-user premises, such as half-ringers.³

Absence of Mechanized Test Access

Traditional telephone circuits can be tested mechanically. DSL circuits cannot be tested in this manner.

Requirement for Loops with Defined Electrical Characteristics

Some defined DSL loop characteristics include maximum loop length, allowable bridged-tap and loading coil limitations. It is important to note that DSL cannot be installed on loops having load coils (a common technology used to extend the allowable loop length of voice-grade circuits) and generally cannot be installed over fiber-optics.

These technical differences between DSL UNE Loops and traditional telephone services create differences in the processes for pre-ordering, ordering, provisioning, installation and maintenance of DSL UNE Loops. These process changes, in-turn, prevent BA-NY from independently provisioning and installing quality DSL UNE Loops for CLECs without the full cooperation and participation of those CLECs in the installation and testing process. BA-NY depends on the CLECs to provide detailed specifications, to participate in circuit identification and to jointly test installed services to provide an end-to-end service delivery process that delivers a working circuit on the date it is scheduled to be delivered.

Early cooperative assessment of BA-NY's and the CLECs' DSL UNE Loop performance showed opportunities to introduce process and technology improvements. To aid in the realization of these opportunities, the DSL collaborative was initiated by the Commission. In

³ A half-ringer is a device deployed at the end-user premises that is used in mechanized line testing of traditional telephone services.

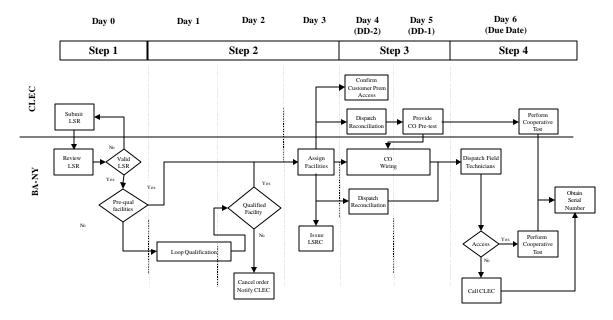
addition to BA-NY, approximately two dozen CLECs that presently provide, or have plans to provide digital services, have participated.⁴

B. Overview of the DSL UNE Loop Provisioning Process

The current DSL UNE Loop provisioning process is a voluntary cooperative process between BA-NY and CLECs ordering the DSL UNE Loop for their end-user customers. The process has four major work steps:

- CLEC DSL order preparation, submission and validation;
- Facility qualification and assignment;
- CO wiring; and
- Field installation and cooperative testing.

The following provisioning process flow diagram represents a current high-level view of the activity and decision sequences within the provisioning process:



BA-NY DSL Provisioning Flow

4

⁴ The collaborative is open to all interested CLECs.

As the collaboratively developed provisioning process is voluntary, certain DSL providers do not participate in one or more of the identified process steps. Parties may opt out of DD-2 pre-test, deployment of test equipment necessary for joint testing, or providing of a 800 number to facilitate serial number closure. In these cases, the provisioning process varies from that described above as follows: BA-NY will work with each CLEC to the maximum extent possible, BA-NY will call and cooperatively test if a 800 number is provided even where DD-2 testing was not undertaken, however, results of such a practice have been shown to be less successful than the standard DD-2 pre-test. BA-NY will also call if a 800 number is provided to provide demarc information even where the CLEC cannot do a cooperative test. BA-NY will not call a number that is not an 800 number.

1. Preparation And Submission Of A Valid DSL Local Service Request

The submission of a Local Service Request ("LSR") initiates the provisioning process.

DSL LSRs are reviewed by BA-NY for validity, and if valid are released for processing. Invalid orders are returned to the CLECs for modification and resubmission. ⁵

2. Facility Qualification And Loop Assignment

Facility qualification and loop assignment follows validation of the LSR ⁶. Facility qualification is the process of ensuring that the serving terminal for a particular working telephone number ("WTN") or service address ("SA") is a qualified DSL UNE Loop. This process can follow one of two paths:

 Mechanized Qualification: The CLEC queries the mechanized loop qualification database using the WTN or SA. If the response is positive, a

⁵ A valid LSR is one that conforms to current guidelines for ordering BA-NY DSL UNE Loops.

notation is included with the LSR and the LSR is sent to BA-NY. No further loop qualification is required upon receipt by BA-NY.

• Manual Qualification: LSRs received by Bell Atlantic without a qualification notation are qualified manually. A BA-NY engineer using the WTN executes a Mechanized Loop Test ("MLT"). The results of the test are interpreted to determine whether the loop is qualified. If the loop is qualified, the LSR is sent for processing. If the loop is not qualified, BA-NY will attempt to identify alternative spare facilities or to identify the possibility of a local service transfer ("pair swap").

After facility qualification is completed, BA-NY assigns the qualified facility. If no qualified facility is available, BA-NY notifies the CLEC that facilities are unavailable and the order is cancelled.

3. CO Wiring

After loop assignment, BA-NY completes the CO wiring of the DSL order, connecting the loop to the CLEC co-location arrangement within the CO. If a pair swap is involved in order to obtain a qualified "spare" loop, BA-NY transfers the service currently working on the DSL qualified facility to another loop or facility making the qualified DSL loop available for assignment.

4. Field Installation

When the CO wiring is completed, BA-NY and the CLECs conduct cooperative testing of the installed DSL UNE Loop. Upon successful installation and testing, the CLEC provides

^{(...} Continued)

⁶ As agreed in the C-2-C proceeding, BA-NY will develop additional GUI/EDI functionality to provide for manual loop qualification as a stand alone pre-order transaction.

BA-NY with a serial number. If a no-access condition is encountered at the end user premise,
BA-NY will contact the CLEC. The CLEC will attempt to obtain access while the BA-NY field
technician waits. If the effort to obtain access fails, the CLEC will provide the BA-NY
technician with a serial number to verify that no-access was encountered.

C. DSL UNE Loop Performance Standards

BA-NY agreed to disaggregate a substantial number of metrics for DSL UNE Loops and related services in the Carrier-to-Carrier ("C2C") subgroup proceeding in Case 97-C-0139. BA-NY has proposed that three key DSL metrics (manual loop qualification, on-time completions and post installation troubles) be added to the Amended Performance Assurance Plan ("APAP") beginning with January performance. Subject to a final determination by the Commission, BA-NY has committed to the following DSL performance metrics and standards for the APAP:8

1. Ordering: P0-8 - Manual Loop Qualifications

Metric PO-8 has two submetrics that measure manual loop qualification and engineering record request response times, with the following standards:

 95% within 48 hours for loop qualification not requiring engineering record query; and

[.]

On November 3, 1999, the PSC adopted the APAP. The APAP contains measurements and standards that collectively require BA-NY to achieve excellent wholesale service quality. The APAP, which became effective on January 3, 2000, subjects BA-NY to substantial CLEC rebates for substandard performance. Because the procedures for the provisioning of DSL UNE Loops, and the related service standard and metrics, were still under discussion in the DSL and C2C collaboratives, the APAP contained a placeholder for DSL UNE Loop metrics. Measurements and standards for DSL UNE Loop services were subsequently agreed to in the C2C collaborative, and BA-NY has proposed that certain DSL metrics be added to the APAP. (*See* December 10 Letter at 4-5.)

⁸ On December 23, 1999, the Commission issued a notice requesting comments on BA-NY's proposal. See Case 97-C-0271, Petition of New York Telephone Company for Approval of its Statement of Generally Available Terms and Conditions Pursuant to Section 252 of the Telecommunications Act of 1996 and Draft Filing of Petition for InterLATA Entry Pursuant to Section 271 of the Telecommunications Act of 1996, and Case 99-C-0949, Petition filed by Bell Atlantic-New York for Approval of a Performance Assurance Plan and Change Control Assurance Plan, in 97-C-0271 "Notice Inviting Comments" (issued December 23, 1999).

• 95% within 72 hours for facility qualification requiring engineering record query.

BA-NY will begin to report on this metric beginning with January performance.

2. Provisioning And Installation: PR-4 - Missed Appointments

This metric includes five submetrics: PR-4-14 through PR-4-18. These submetrics report performance on the provisioning procedure that was developed in the DSL collaborative and reflect the joint testing process developed by the collaborative. Given the evolving nature of the DSL process, BA-NY has proposed absolute standards for these PR-4 submetrics as follows:

- 85% for performance during the first quarter of 2000;
- 90% for performance during the second quarter 2000; and
- 95% after second quarter 2000.9

BA-NY will begin to report on PR-4-14, PR-4-15, PR-4-16, PR-4-17, and PR-4-18 beginning with January 2000.

3. Installation Quality: PR-6 – Installation Troubles

This submetric, PR-6-01, measures quality of service installation as indicated by reported troubles within a specified time after installation. This metric will be disaggregated to report the percent of installation troubles on DSL UNE Loops within 30 days. BA-NY proposes that the standard be set at parity with retail dispatch performance. BA-NY will begin to report on this metric beginning with January 2000 Performance.

III. DSL UNE LOOP PERFORMANCE IMPROVEMENTS – JULY 1999 - DECEMBER 1999

Through the DSL collaborative, BA-NY and the CLECs have focused on process

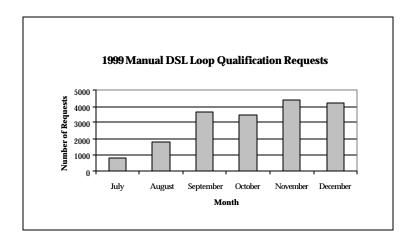
⁹ These absolute standards are based on the assumption that an exclusion will exist for "Missed for Facilities" for these submetrics. This will exclude on-time completions missed due to the lack of DSL qualified facilities after BA-NY has made a diligent effort to locate qualified DSL facilities. BA-NY reserves the right to suggest in the future an alternative, parity-based standard for this metric.

improvements for the provisioning of wholesale services to CLECs providing DSL services.

These process changes, described below, have significantly raised BA-NY's performance levels. Currently, BA-NY's performance levels are at or near the performance-level targets for PO-8, PR-4 and PR-6 described above for January 2000.

A. Improvements In DSL Loop Qualification And Engineering Request Performance

Manual loop qualification is an important part of the DSL provisioning process. Over time, the number of manual loop qualification requests has grown, and this growth is expected to continue at least into the second quarter of 2000. ¹¹ The following chart shows the growth of manual loop qualification requests from July – December 1999 for BA-North. ¹²



Prior to January, 2000, BA-NY did not directly track manual loop qualification performance. Since FOC on-time completions closely tracks manual loop qualification performance, it was used as the data source for performance trending for the pre-January 2000

¹⁰ As noted, these improvements form the foundation of BA-NY's future plans which are described below in Section IV.

¹¹ Line Sharing may possibly reduce loop testing, but should not have a dramatic impact on Loop Qualification requirements since the CLECs will still need to determine whether the end user's loop is DSL compatible.

¹² Disaggregated data is unavailable for BA-NY.

period. The following graph reflects the performance from November, 1999, to January, 2000:



Data for Nov '99 available from last 2 weeks of month; Note: data for Jan '00 is for first 2 weeks.

Recognizing the importance of loop qualifications to overall DSL provisioning performance, BA-NY and the DSL collaborative have placed strong emphasis on improving the process. Despite the approximately five-fold growth in request volume, this emphasis has resulted in noticeable improvement in loop qualifications completed within the defined time windows, 13 and it is primarily attributable to the: (1) implementation of a dedicated manual loop qualification work force; and (2) the deployment of a mechanized loop qualification database.

1. Implementation Of Dedicated Manual Loop Qualification Work Force

In July 1999, BA created the Loop Qualification Team ("LQT"), consisting of approximately thirty specially-trained representatives to process all manual DSL loop qualification requests. The LQT and the process changes that directed all manual loop qualifications to the LQT have contributed significantly to the improvement in BA-NY's loop qualification performance.

¹³ Current performance is at or above the target level for PO-8 (95%).

2. Deployment Of Mechanized Loop Qualification Database

a. Conversion Of Wire Center Data

BA-NY began the implementation of a mechanized loop qualification database in September, 1999. ¹⁴ As of September 30, 1999, BA-NY had inventoried 114 New York wire centers in the database. As of January 10, 2000, 208 New York wire centers had been inventoried in the DSL loop qualification database. By April 1, 2000, BA-NY will add 67 additional New York wire centers to the database. The BA-NY commitment to have 93% of wire centers with co-location arrangements inventoried in the DSL loop qualification database by year-end 1999 was met. The percentage of wire centers inventoried continues to progress toward 100% despite the continually increasing number of co-location arrangements.

As an increased number of wire centers were converted to the mechanized database during the second half of 1999, the frequency of CLEC use of the database likewise increased. This has absorbed much of the growth in loop qualification transaction volumes experienced the last quarter of 1999, enabling BA-NY to manage the manual volume with the LQT.

b. Consolidation Of Address Databases

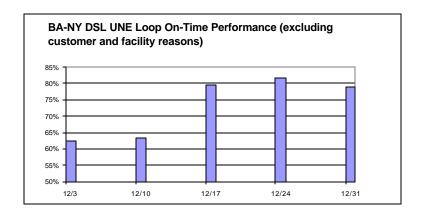
Historically, one limitation of the mechanized loop qualification database was the work effort required in some areas for qualification queries using an end-user address. This limitation was caused by the existence of three different address databases within BA-NY's operational support systems ("OSSs"). Beginning on August 20, 1999 with the Bronx, BA-NY began converting wire centers to LiveWire to consolidate address data into one master database. With the conversion of Syracuse, Albany and Binghamton on December 10, 1999, all New York wire centers have been converted to the new system. CLECs can now submit a loop qualification

¹⁴ Prior to September, 1999, manual loop qualification was the only method employed. The mechanized database was not ready for CLEC use.

request with either a telephone number or an end-user address.

B. Improvements In On-Time Completion Performance

BA-NY on-time completion performance is showing improvement. The graph below reflects the trend in December 1999.



This improvement has occurred despite a noticeable increase in DSL UNE Loop request volumes which increased from an average weekly volume of 420 in November 1999 to 558 in December. The recent performance improvement can be attributed to the combined effects of the following Plans and Programs that were instituted through the DSL collaborative:

- CLEC DSL training;
- coordination process for the implementation of pre-provisioning testing and jeopardy status;
- implementation of pair swapping;
- implementation of no access management and coordination process;
- implementation of a cooperative testing process;
- redesign of the CO wiring process;
- implementation of field installation work force to work load management; and
- specialized training of field installation forces.

1. CLEC DSL Training

To assist CLECs in understanding the DSL wholesale products and the related pre-order,

order, provisioning, installation and maintenance processes, BA-NY hosted multiple training sessions and workshops in 1999. DSL pre-ordering, ordering and provisioning were covered in three classes in 1999:

- 1. Unbundled Network Element Provisioning Training 24 sessions in 1999 with 309 attendees.
- 2. Resale Complex Products Training 10 sessions in 1999 with 75 attendees.
- 3. August 24, 1999 Digital Loop Workshop 111 attendees representing 38 companies.

In addition, Bell Atlantic hosted a Forecasting Training class on June 10, 1999 with 75 attendees from 46 companies.

2. Coordination Of DSL Order Pre-Provisioning

DSL provisioning success is dependent on the cooperation and the efficiency of all participants in the provisioning process. BA-NY has implemented a communication process with the CLECs for coordinating pre-provisioning activities and for identifying those orders that are past the committed due date. This process, which is followed every business day by BA-NY and the participating CLECs, is summarized as follows:

FOC-2	BA-NY sends to CLECs a list of confirmed order numbers it agrees are scheduled at FOC-2.
FOC-1	The CLECs deliver to BA-NY a list of confirmed order numbers and preliminary distance test results on FOC-1.
FOC+1 to FOC+5	BA-NY delivers to CLECs status reports of DD+1 through DD+5.
FOC>+5	BA-NY delivers to CLECs aggregated status report of orders FOC>+5.

3. Implementation Of Pair Swapping

Pair-swapping is a process innovation BA-NY implemented as a means to reduce the

number of requests for which a DSL qualified UNE loop could not be assigned. During loop assignment or field wiring or both, BA-NY will sometimes find that the loop serving the service address is unusable or unavailable to be assigned as a DSL UNE Loop. If this occurs, BA-NY will check for a suitable spare facility, and, if one is available, BA-NY will attempt to use it for the installation. In the past, if no suitable spare facility was available, the LSR would be rejected for facility reasons.

Under the concept of pair swapping, BA-NY searches for candidate DSL facilities within the serving terminal. If a DSL compatible loop is found, the BA-NY technicians have been directed to transfer the existing services (such as POTS) to alternate facilities. While this process has allowed BA-NY to provide more DSL compatible loops to the CLECs and reduces the number of CLEC orders rejected, the transfer of service creates new CO wiring work and increases the work in the field. If the new work cannot be completed on the due date then the order is tracked as missed for facilities.

4. Implementation Of No Access Management And Coordination Process

In December 1999, BA-NY and the CLECs implemented a no access management and coordination process. BA-NY field technicians, who experience a no access condition at the customer premise, call the CLEC and report the no access. This procedure allows the CLECs to attempt to arrange for access before the BA-NY installer places the order in no access status and moves to his next project. If BA-NY can not obtain access to the premise, and CLEC efforts to arrange for access fail, the CLEC provides the BA field technician with a no access status confirmation.

5. Implementation Of A Cooperative Testing Process

The true measure of provisioning success is the delivery of a mutually acceptable working circuit on the date it is scheduled to be installed. In this regard, a working DSL UNE

Loop is properly cross-connected through the CO to the DSL CLEC cage or POT bay and properly cross-connected in the field through the feeder and distribution plant and associated on premise cabling (*e.g.*, risers). Demarc information is provided in all cases, and where necessary the circuit is tagged for identification. ¹⁵

BA-NY, with the CLECs, developed, and on September 15, 1999, implemented, a cooperative testing method for provisioning DSL. Under this method, which is used by many but not all CLECs, BA-NY and CLEC technicians work together to verify that the DSL UNE Loop is properly installed and working before BA-NY considers the order complete. This cooperative testing approach, which is manually intensive and requires specially trained service technicians, improves the on-time completion performance of the provisioning of DSL UNE Loops. Most importantly, it ensures that the turn-up of the circuit will not generate unnecessary trouble reports. Cooperative testing significantly reduces the risk of installation problems before the end-user obtains service.

6. Redesign Of The Central Office Wiring Process

BA-NY redesigned and simplified the DSL central office wiring process in November, 1999, to eliminate the wiring of a special test access point. An important part of this simplification is the use of the Frame Order Management System ("FOMS") that makes the CO wiring for DSL UNE Loops similar to the wiring for non-designed services. FOMS also provides enhanced management tools for Frame Order work load management. This simplified process eliminates the need for involvement of OSSs that are normally involved in provisioning designed services and enables BA-NY to offer a six-day delivery interval for DSL UNE Loop installations.

¹⁵ A DSL Collaborative working group will meet to formulate the definition of "necessary."

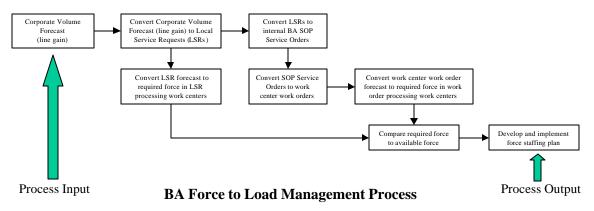
7. DSL Field Installation Work Force To Work Load Management

BA-NY has adopted a work force management process. This process utilizes forecasted service demand by wire center per month as a way to identify upcoming work load and staffing requirements. BA-NY increased its field (installation) force for unbundled network element work in general, and for DSL specifically, beginning in October, 1999, by reassigning technicians from other work areas to meet installation work load demand. Additionally, BA-NY created a specially trained DSL installation force to handle all DSL installation work. By December, 1999, sufficient staffing had taken place that the number of orders past the committed due-date because of "pending dispatch out" had been reduced to zero percent of the DSL order volume. Other work centers, such as the Loop Qualification Team, have likewise adopted this work force to work load management process.

The work force to work load management process uses BA-NY corporate volume forecasts as its primary input. The corporate volume forecast, which is prepared by BA-NY product management, includes expected line gain in each product line (including DSL UNE Loops) by month for each BA-NY wire center. The line gain forecasts are then converted to forecasts of service and work orders which, in turn, are used as input in the determination of force requirements in BA-NY work centers. This process results in staffing plans that are then implemented in the work centers. All wholesale work centers involved in DSL UNE Loop delivery revisit the force to load process on a monthly basis. A high-level view of the process is as follows:

_

¹⁶ "Pending dispatch out" statistics provide an indication of BA-NY's ability to size its installation workforce to work load.



In addition, BA-NY holds daily internal and supervisory conference calls as a means of maintaining and improving DSL work center performances.

8. Specialized Training Of Field Installation Forces

All DSL installation work is provided by special trained field technicians. Each BA-NY DSL field technician receives a 10-day formal training program for basic installation and maintenance instruction. Upon successful completion of the 10-day formal training, the technician receives an additional 3-days of formal instruction in DSL and data transmission installation and maintenance. Additionally, local field offices/garages have developed local training/test labs to assist in the development of the technicians' skills specific to the network characteristics of the locality and the associated transmission tests and acceptable test parameters.

C. Improvement in Installation Related Trouble Report Performance

BA-NY performance on the installation related trouble report metric, PR-6-01, has remained in the range of 4% to 6% through the last half of 1999. This performance has been accomplished despite an approximately five-fold increase in monthly order completion volume from August through December, 1999 and is attributable to the combined effects of cooperative testing during DSL provisioning, simplified CO wiring (FOMS process), training of installation field technicians, and pre-qualification of DSL facilities. BA-NY will continue existing work

force training, policies, and procedures and continue to support cooperative provisioning procedures so that performance is maintained at or above target performance levels.

IV. PLANNED DSL PERFORMANCE IMPROVEMENTS – JANUARY - MARCH 2000

BA-NY and the CLECs working cooperatively will continue to improve DSL performance through year 2000. The previously implemented Plans and Programs will be continued, and BA-NY will enhance its processes to further improve cooperative provisioning of DSL wholesale products to the CLECs. Planned improvements include loop qualification process enhancements, such as providing additional information to the CLECs on facility qualification request responses. In addition, BA-NY will improve its on-time order completion performance through a number of Plans and Programs described below.

A. Loop Qualification Process Enhancements

To continue to improve its performance related to DSL UNE Loop qualification, BA-NY will provide additional loop qualification information with the loop qualification responses. In the DSL collaborative, CLECs have requested additional information for inclusion with loop qualification responses from BA-NY. Currently, BA-NY provides the following information:

- Automated Facility Qualification: MLT-measured facility length, on unloaded loops (generally less than 18 kft), and the yes/no DSL qualified indication. ¹⁷
- Manual Facility Qualification: MLT-measured facility length (regardless of length), indicator for loaded or unloaded facility, and indicator for DLC/non-DLC facility.

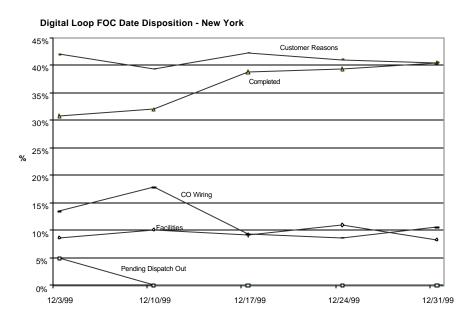
BA-NY is assessing its ability to provide the additional information the CLECs have requested and the costs associated with these requests. BA-NY will modify the mechanized loop qualification database consistent with agreements reached in the DSL collaborative as well as

¹⁷ This is more information than is currently provided to BA-NY retail representatives who receive only the yes/no DSL qualified indication.

with Commission rulings if required.

B. Enhancements To The On Time Order Completion Process

By the end of December 1999, excluding customer and facility reasons, the majority of on-time completion misses were for CO wiring. The number of orders past the due date for CO wiring reasons has shown improvement through the last quarter of 1999. This improvement occurred, however, at the same time that BA-NY implemented pair swapping. As noted, pair swapping complicates and expands the CO wiring work and hinders BA-NY's ability to meet the committed due dates. BA-NY will work with the CLECs to identify ways to minimize the impact of pair swapping on due date commitments. The graph below shows the disposition of orders on the DD+1 for the month of December, 1999. ¹⁸



BA-NY intends to adopt the following additional improvements to enhance on-time completions:

18

¹⁸ It is important to note that the disposition on DD+1 may actually change as more information becomes available on DD+2 and beyond. For example, some of the delays attributed to BA-NY CO wiring may actually be attributable to CLEC reasons.

- Cooperative Testing Stage 2;
- CLEC access to Order Query System ("OQS") summary report tool;
- Supervision of CO and field installation work;
- CLEC education;
- Force to work load management;
- CLEC forecasting; and
- Load grooming.

1. Cooperative Testing - Stage 2

BA-NY and the CLECs plan to deploy technologies that are expected to provide improved testing efficiency and flexibility, such as allowing for testing of the outside plant facilities and loops independent of the status of CO wiring. Critical aspects of Cooperative Testing – Stage 2 are: (1) the deployment of intelligent demarcation technology; and (2) the use of tone generating equipment by the CLECs.

Use of these technologies will allow BA-NY and the CLECs to manage better the DSL installation work loads and reduce coordination. This is also likely to reduce the time required to accomplish cooperative testing on the due date since a significant part of the testing sequence will have already been accomplished through these technologies.¹⁹

a. Deployment Of Intelligent Demarcation Technology

Intelligent demarcation technology is expected to provide flexibility and efficiency in DSL UNE Loop installation and maintenance for those CLECs that choose to participate in this voluntary process improvement. The intelligent demarcation is installed by BA-NY at the

¹⁹ Since cooperative testing significantly reduces the risk of installation problems, BA-NY will also seek to increase the number of CLECs ordering DSL UNE Loops that participate in the cooperative testing processes outlined in Section III(B)(5), *supra*.

demarcation between the end-user premises and the BA-NY network facilities. Where the possibility arises, the intelligent demarcation can be installed before the installation due date to allow for CLEC testing of the assigned DSL facilities upon completion of CO wiring, allowing the CLEC to test the DSL circuit without a re-dispatch. BA-NY is planning a cooperative trial of the intelligent demarcation technology during the first quarter of 2000.

b. Use Of CLEC Tone-Generating Equipment

Use of tone generating equipment by the CLECs can likewise improve installation process efficiency by providing BA-NY with the ability to test CO wiring and facility wiring before the due date. BA-NY will commit to a cooperative trial of tone generating technology with the CLECs during the first quarter of 2000.

2. CLEC Access To OQS Summary Report Tool

BA-NY has developed and is presently testing on an internal-use basis, an OQS summary reporting tool. CLECs have had access to OQS reports through the web interface, but have expressed a desire for enhancement of their ability to track order status. BA-NY intends to provide limited CLEC access to the OQS summary reporting tool using a secure web interface on a trial basis during the second quarter of 2000. Pending the successful completion of internal testing, BA-NY will provide access to an increased number of CLECs on a schedule to be determined at that time. ²⁰ ²¹

3. Supervision Of CO And Field Installation Work

BA-NY will continue to hold daily internal and supervisory conference calls as a means

²⁰ CLEC participation in this process improvement is also voluntary. BA-NY is prepared to conduct this trial upon notification from the CLEC(s) that it is ready to proceed.

²¹ While BA-NY it is not obligated to provide such enhanced access to the CLECs, it will do so in the interest of cooperative improvement.

of maintaining and improving work center performance for DSL.

4. CLEC Education

In 2000, BA-NY plans to continue its CLEC education efforts. Currently, ten sessions of Unbundled Network Element Provisioning Training and six sessions of Reseller Complex Products Training are scheduled through June 2000.

5. Force To Work Load Management

BA-NY will continue to use the force to work load management process throughout the balance of 2000. (*See* Section III(B)(7), *supra*.) Staffing plans have already been prepared for key DSL UNE Loop work load processing centers, and additional staffing activities are underway where appropriate. It is not clear at this time what impact Line Sharing will have on BA-NY's work load management. BA-NY's work load management process, however, provides a flexible management tool for meeting the needs of its wholesale DSL CLEC customers as market demands grow and/or shift among the various DSL products.

6. CLEC Forecasting

BA-NY relies on the CLECs to provide accurate and timely forecasts of service demand, by wire center, on a semi-annual basis. Accurate forecasts can provide BA-NY and the CLECs with the ability to make sound network investment and work force decisions. In the past, CLEC forecasts for other UNE products have been insufficiently accurate for such use. BA-NY will work with the CLECs to obtain useful DSL UNE Loop forecasts.

7. Load Grooming

Load grooming is management of DSL UNE Loop provisioning and testing work load that exploits opportunities for early dispatch of field technicians. Early dispatch can help reduce the risk of missed timing on tightly-scheduled, multi-step dispatch work. Unfortunately, this process increases the risk of unsuccessful dispatches due to no access at the end-user location.

BA-NY will load groom to the extent feasible, given work load management and efficiency concerns.

V. FUTURE DSL PERFORMANCE IMPROVEMENT CONSIDERATIONS

After March 2000, BA-NY will continue the implementation of improvements for its DSL UNE Loop products. The evolution of DSL products and technologies are expected to require as yet unforeseen changes to processes and organizations. While it would not be prudent at this time for BA-NY to predict what, if any, new processes may be necessary, BA-NY, working with the Commission Staff and CLECs, will continue to build upon past successes, and to plan for the impact of new innovations and market requirements. In particular, the introduction of Line Sharing could have a significant influence on the work efforts related to the provisioning of DSL UNE Loops²²

A. Implementation Of Line Sharing

As noted, line sharing allows high-speed data DSL services to be delivered over the same facilities as voice communications. Line sharing may provide some significant opportunities for BA-NY and the CLECs such as: (1) more efficient, mechanized facility and service testing; and (2) more efficient line identification, through the presence of dial tone and CO battery power.

BA-NY is evaluating line sharing technologies, and is preparing, on a cooperative basis, a pilot line sharing project with a number of CLECs. As part of this process, BA-NY has requested the CLECs to provide preliminary line sharing forecasts in February, 2000, and refined line sharing forecasts in June, 2000. These line sharing forecasts, which are essential for planning for the cooperative line sharing pilot, will also provide BA-NY with significant insight

²² Additionally, BA-NY is prepared to make existing LMU information and LMU information derived on a going forward basis available to CLECs through a specific request through the Data base. A CLEC (Continued . . .)

into whether market demand will shift significantly from the provision of DSL service by CLECs over DSL UNE Loop to line sharing arrangements.

VI. CONCLUSIONS

The Cooperative Improvement Plans and Programs set forth in this document provide more than sufficient mechanisms to assure that DSL UNE Loops will be adequately provisioned by BA-NY during 2000.

(...Continued)

will be able to submit a query to the Database through BA-NY's standard Operations Support System wholesale interfaces, including EDI, the Web GUI, and CORBA.